8. Aeronautical Telecommunications.—During 1956-57 satisfactory progress was made with modernization of the aeronautical telecommunications system throughout the Commonwealth, in accordance with plans developed in previous years. Improved coverage by VHF communication was achieved on air routes covering Bass Strait and the new key communication centre at Cloncurry was brought into operation.

Installation of Instrument Landing Systems and their associated high-intensity approach and runway lighting systems was commenced at Sydney (No. 1 installation), Hobart and Adelaide. Monthly flight-testing of the Sydney (No. 1) and Melbourne Instrument Landing Systems was undertaken to ensure a high standard of operation of these essential landing aids. The Distance Measuring Equipment programme proceeded satisfactorily and at the end of the year 64 beacons were in operational use, whilst three more were awaiting final flight-testing and two were nearing completion of installation work. Experimental work being undertaken to increase the handling capacity of the Distance Measuring Equipment system by increasing the number of channels per beacon will, if successful, enable improvements to be made in the scope of the system and increase its useful operational life. The Visual Aural Range programme is now practically complete.

9. Air Traffic Control.—The Air Traffic Control System was temporarily extended and re-arranged to handle the increased traffic resulting from the Olympic Games in Melbourne. Aircraft movements additional to normal traffic which were directly attributable to the Olympic Games amounted to 670 at Melbourne, 550 at Sydney, and 240 at Darwin, with minor increases elsewhere. All were handled without incident. At Melbourne a modern Air Traffic Control centre and Airport Control Tower of Australian design was commissioned, incorporating new communication features; the Air Traffic Control centre was completed late in 1956 in time to handle the peak Christmas and New Year traffic. Airport control as required by traffic demands was also established at Coolangatta Airport, Queensland.

Procedures for expediting the handling of airport traffic through the use of high and low stacks were introduced at Melbourne and Sydney and a one-way traffic airways system between Melbourne and Tasmanian airports was brought into operation. The control procedures applied to light aircraft at "all over" training airports were revised after several full-scale experiments with various systems at Bankstown airport. Planning was completed for a "self help" Search and Rescue Service based on the maximum employment of civil facilities. Action to implement this plan was commenced. The Light Aircraft Handbook, a publication covering the rules and regulations governing the operation of the lighter class of aircraft, was issued during the year.

- 10. Meteorological Aids to Civil Aviation.—The development of working arrangements between the newly constituted Bureau of Meteorology and the Department of Civil Aviation was further advanced. A review of the present scale of meteorological aids to civil aviation, now in progress, will be finalized in the form of a plan covering all aspects of the provision of meteorological services to civil aviation. At aerodromes in Australia and its Territories officers of the Bureau of Meteorology provide forecasting and observing services for civil aviation. There are 12 forecasting and 29 observing stations.
- 11. Aircraft Parts and Materials.—At 30th June, 1957, the number of firms and organizations approved by the Department of Civil Aviation to trade in the aircraft industry was 436. With the introduction of gas turbine engines and pressurized aircraft, certain firms have been approved to undertake the specialized work of overhaul, repair and maintenance of these engines and of accessories. The major fuel and oil companies have been brought under a system of quality control.